REMARKS

The Office Action dated March 28, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 22-33, 35-37, and 39-46, including independent claims 22, 39, 44, and 46, are currently pending in the application. Specifically, Applicants here amend claims 22, 39-44 and 46 to more particularly point out and distinctly claim the subject matter that the Applicants regard as the invention. It is respectfully submitted that the amendments add no new subject matter to the present application and serve only to place the present application in better condition for examination. Therefore, entry of the amendments and consideration of the pending claims, as amended, are respectfully requested. It is believed that all grounds for rejection in the Office Action have been addressed and that the present application is currently in condition for allowance in view of the amendment and the following comments. Reconsideration of and allowance of claims 1-34 are respectfully requested.

Objections to the Claim

The Office Action objected to claim 39 due to a minor error. In response, Applicants have amended this claim as suggested in the Office Action. Accordingly, withdrawal of this objection and reconsideration of claims 39 are respectfully requested.

Rejection under 35 U.S.C. §101

The Office Action rejected claim 44 under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection as being legally and factually improper on several grounds.

As an initial note, the rejection is improper because the Office Action did not allege that claimed subject matter is improper for including non-patentable subject matter under 35 U.S.C. §101. Instead, the Office Action rejected claim 44, which is directed to the patentable subject matter of a "computer-readable medium" under MPEP §2106, as allegedly failing to comply with the written description requirement. Specifically, the Office Action asserted that claim 44 contains subject matter which was not described and, therefore, not supported in the specification of the present application. Thus, this rejection under §101 is improper and should be withdrawn, and the rejection should have been made under 35 U.S.C. §112, first paragraph. Even if this rejection was properly raised Applicants respectfully traverse this rejection.

Even though "computer readable medium" or "software" is not explicitly discussed in the specification, "computer readable medium" is inherently described in the specification. As described below, embodiments of the present invention are directed to a connection handover in response to detected conditions within a communications network. A person of ordinary skill in the art would clearly appreciate the present

application and arrive at the computer program embodied on a computer readable medium without undue experimentation.

Moreover, Applicants respectfully submit that the Office Action has not made a proper enablement rejection under 35 U.S.C. §112, first paragraph. "The enablement requirement refers to the requirement of 35 U.S.C. §112, first paragraph that the specification describe how to make and how to use the invention" (MPEP § 2164). "[I]t has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without **undue experimentation**" (MPEP § 2164.01, emphasis added). The Office Action has not addressed the test for enablement.

Further, there is no evidence in the record that the Office Action considered the factors associated with undue experimentation. These factors include, but are not limited to:

- The breadth of the claims;
- The nature of the invention;
- The state of the prior art;
- The level of one of ordinary skill;
- The level of predictability in the art;
- The amount of direction provided by the inventor;
- The existence of working examples; and
- The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

(MPEP § 2164.01(a)). "The examiner's analysis must consider all the evidence related to each of these factors, and any conclusion of non-enablement must be based on the evidence as a whole" (*Ibid*).

Additionally, Applicants respectfully submit that "user equipment," "core network," and "base station controller," as defined in relevant technical standards in the field communications, necessarily include computer hardware and software components, and therefore, the specification is enabling with respect to the claimed invention of claim 44. Applicant further urge that the specification contains express support for software elements. For example, as disclosed at page 16 at lines 22 and 35, the specification disclosed that an "application" in the mobile station may send a request for a service. Based at least on these descriptions, Applicants respectfully submit that a person of ordinary skill in the art would readily be able to make and use the claimed invention without undue experimentation. Accordingly, it is respectfully submitted that the rejection be withdrawn.

Rejection under 35 U.S.C. §103(a)

All of the pending claims 22-33, 35-37, and 39-46 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of U.S. Patent No. 5,878,349 (Dufour) and U.S. Patent No. 5,826,188 (Tayloe). According to the Office Action, Dufour discloses all elements of the claims except for initiating an error procedure when

a desired service is not available in one of the two radio access networks. To address this deficiency in Dufour, the Office Action cites to Tayloe. However, as described in greater detail below, the combination of Dufour and Tayloe fails to disclose each and every limitation of these claims as required for a proper rejection under 35 U.S.C. §103(a). Therefore, reconsideration and allowance of these claims are respectfully requested in view of the following remarks.

Independent claim 22, from which claims 23-33, 35-38, and 45 depend, recites a method, including detecting a request for specific service, where the request for specific service is received from at least one of a first access network and a second access network. Next, information is accessed on conditions for the first radio access network and the second radio access network for giving sufficient support for a specific service requested by the request for specific service. Then, it is analyzed whether or not the first radio access network and the second radio access network meet the conditions. A handover of the radio transceiver device from the first radio access network to the second radio access network is initiated if the conditions are met by the second radio access network but the first radio access network does not, where a radio transceiver device capable of operating with the first radio access network and the second radio access network is attached to the first radio access network, and where an error procedure is initiated, when it is detected in the analyzing that the requested specific service is not available in any of the networks.

Independent claim 39, from which claims 40-43 depend, relates to a device that includes a detector configured to detect a request for specific service, where the request for specific service is received from at least one of a first radio access network and a second radio access network. The device further includes an analyzer responsive to the detector, the analyzer configured to access information on conditions for the first and the second radio access networks for giving sufficient support for the specific service requested by the request for specific service and analyze whether or not the first radio access network and the second radio access network meet the conditions. The device has an initiator responsive to the analyzer, the initiator being configured to initiate a handover of the device from the first radio access network to the second radio access network if the respective conditions are not met by the first radio access network but by the second radio access network. More specifically, the apparatus is a network interworking device configured to operate with a telecommunication network, and the telecommunication network includes at least two radio access networks, and a radio transceiver device capable of operating with the first radio access network and the second radio access network is attached to the first radio access network. Also, the network interworking device is configured to initiate an error procedure is initiated, when it is detected in the analyzer that the requested specific service is not available in any of the networks.

Independent claim 44 relates to a computer program embodied on a computer readable medium, for performing a method. The method includes detecting a request for specific service, where the request for specific service is received from at least one of a first radio access network and a second radio access network. The method further includes accessing information on conditions for the first and the second radio access network for giving sufficient support for a specific service requested by the request for specific service. The method includes analyzing whether or not the first radio access network and the second radio access network meets the conditions, and initiating a handover of the a device from the first radio access network to the second radio access network if the second radio access network meets the conditions but the first radio access network does not. A radio transceiver device capable of operating with a first radio access network and a second radio access network is attached to the first radio access network, and the first radio access network and the second radio access network being of different kinds. Also, an error procedure is initiated when it is detected in the analyzing that the requested specific service is not available in any of the networks.

Independent claim 46 relates to a device that includes a detecting means for detecting a request for specific service, where the request for specific service is received from the network side. The device includes an analyzing means responsive to the detecting means and having the functionality of accessing information on conditions for the first and the second radio access networks for giving sufficient support for the a

specific service requested by the request for specific service and analyzing whether or not the first radio access network and the second radio access network meet the conditions. An initiating means in the device, responsive to the analyzing means, is configured to initiate a handover of the device from the first radio access network to the second radio access network if the respective conditions are not met by the first radio access network but by the second radio access network. The device is a network interworking device and includes means for operating with a telecommunication network, and the telecommunication network includes at least two radio access networks, and a radio transceiver device capable of operating with the first radio access network and the second radio access network is attached to the first radio access network. The network interworking device includes means for initiating an error procedure when it is detected in the analyzing means that the requested specific service is not available in any of the networks.

Applicants have carefully reviewed Dufour and Tayloe and respectfully submit that each of the above-noted independent claims recites subject matter that is not taught or disclosed by the combination of Dufour and Tayloe.

In detail, Dufour describes a call set-up on a 800 MHz analog voice channel from a channel 1900 MHz digital control cannel. That is, Dufour is directed to the situation of two different networks. As described in column 1, lines 64 to 67, Dufour deals with the problem that in case the mobile station is served on a system (1900 MHz digital control

channel) that does not support an analog voice channel, to set up a call on a 800 MHZ analog voice channel instead. As shown in Fig. 1 in Dufour, there are two clusters of cells, wherein cell sites A and B operate on the 1900 MHz standard (digital), and cell sites A' and B' operate on the 800 MHz standard (analog). See, also, Dufour at Fig. 3A and 3B and in column 4, line 46, to column 5, line 23, to which also the referenced in Office Action.

In Dufour, the mobile station is originally on a DCCH. When then the <u>user requests</u> an analog service (analog voice channel), this call is initially set-up on the digital traffic channel (column 4, lines 63 to 56). Thereafter, the audio voice channel is initiated in a collocated hyperband neighboring cell which is defined as overlaid, i.e., provided on such a collocated hyperband channel (column 5, lines 1 to 9, steps 38 to 41). In addition, also a hyperband measurement is carried out (column 5, lines 13 to 18, steps 42 to 47). That is, so-called candidate channels are provided, and the base station selects the best channel, wherein the mobile station is instructed to tune to the selected audio voice channel (column 5, lines 13 to 18).

According to Dufour, a handover from a digital system to an analog system is carried out in case an analog service is requested. As an initial note, Applicants note that the analog connection, as disclosed in Dufour is not a "service" as defined in the present specification and within the field of telecommunications. Moreover, there is no analysis of the availability of services in Dufour since the digital system must already knows that

the analog service is not supported before initiating the handover. Thus, Dufour does not disclose or suggest the limitation of "analyzing" information regarding supported services, as recited in claim 22. The availability of supported services is assumed in the networks described by Dufour, so that this references does not teach or suggest the "analyzing' limitation, since there is no reason for performing such an analysis in the network of Dufour.

Regarding the analyzing limitation, the Office Action cites to a passage of Dufour regarding the "hyperband measurement" that describes selecting between different analog voice channels based on the measurements, but not to perform a handover to a different radio access network. Dufour cannot suggest the limitation of a first network analyzing whether a requested service is available on another network and the first network initiating a handover of the connection to the other network, since the capabilities of the two different networks in Dufour are clearly defined: the digital system must supports digital services, and the analog system must supports analog services. As described above, the measurements cited in the Office Action relate to identifying which of the second networks best provides the requested communications, and not whether a requested service is provided at all within a second network.

For at least these reasons, Applicants urge that Dufour does not disclose or suggest that information on conditions regarding the service supported by the different networks is actually accessed and that it is analyzed whether both or one of the networks meet the

conditions. Namely, as described above, Dufour only describes the situation when a call set-up for an analog voice channel is requested on a digital channel. That is, the services as such are known, and it is known which network offers the analog channel and which network does not. Thus, Dufour discloses neither the "accessing" nor the "analyzing" of claim 22.

Furthermore, Dufour describes a call-set up initiated by the mobile station, but not a request for a specific service which is received from one of the access networks, as recited in claim 22. Hence, Dufour describes a different system and, thus, a different approach from the recited embodiments of the present application. Specifically, Applicants note that Dufour is expressly directed to a situation in which the mobile device initiates a handover, as shown in Dufour at column 4, line 8 to 12, and also at Fig. 3A. Although Dufour discloses an incoming call, which is indicated by a page received from the serving base station (column 4, lines 52 to 54), Dufour further clearer describes that the handover is initiated by the mobile device because the handover to the analog channel has to be requested by the mobile station in the Page Response (see Dufour at column 4, lines 54 to 67, for example). According to this disclosure in Dufour, even when the connection is terminated by the mobile terminated, the request for the specific service (allegedly, the access to the analog channel) is the mobile station and not received from the network side.

Applicants therefore note that Dufour also does not teach or suggest the limitation from claim 22 of "said request for specific service is received from at least one of a first access network and a second access network" (Emphasis added). As described above, claim 22 recites that an inter-network handover is automatically executed in a mobile terminated case if a request for a specific service is received from the network side. For example, when a remote station would like to start a session which requires a specific service which is not offered or not sufficiently offered in the present access network of the called mobile station, a handover to another network is automatically executed. This limitation is not described nor suggested by Dufour. Moreover, as describes above, there is no reason to perform this action in the configuration disclosed in Dufour which is clearly directed to the capabilities of the mobile station. (See, for example, Dufour at column 4, lines 49 to 59, Fig. 3A).

As admitted in the Office Action, Dufour does not disclose or suggest an error procedure, as recited in claim 22. As described above, continuing with claim 22, Dufour also does not disclose nor suggest the limitations of determining whether to perform an handover between networks, including receiving a service request from the network side, accessing information on conditions whether the access networks can sufficiently support the requested service, analyzing the accessed conditions, and initiating a handover based on this analysis. Likewise, independent claims 39, 44, and 46 and the pending independent claims, although patentably distinct from claim 22 and rejected on separate

basis, recites similar limitations related to an access network-based handover in response to a request from a mobile device for a service that is not available on that network, and are therefore also allowable over Dufour on similar basis, as well as the separate limitations recited in each of the claims.

Applicants further urge that Tayloe does not cure at least the above-described deficiencies in Dufour. The Office Action cites to Tayloe as allegedly curing the above-described deficiencies in Dufour. However, as described below, the combination of Dufour and Tayloe fails to disclose each and every limitation in any of the pending claims.

In particular, Tayloe at column 8, lines 20 to 28, discloses a procedure used **after** a handover is not approved by the new GW (gateway). Thus, Tayloe only describes an error procedure in case the handover request is not successful but does not describe any conditions or motivations for initiating the handover. Referring to claim 22, Tayloe therefore does not disclose or suggest the detecting, accessing, and analyzing steps. For example, as recited in claim 22, a check of whether a service is supported by a second network is performed in embodiments of the present invention before starting the handover. The procedure described by Tayloe (which is not even related to the requested service, as mentioned above) is performed after a handover is attempted, and does not relate determining whether the handover is desired due to the availability of a requested service on the second network. At best, Tayloe relates to attempting a handover and then

addressing the problem of the network being available. Hence, Tayloe also leads toward a different solution to the problems addressed in the present application, and this reference also does not teach or suggest each and every limitation of the pending claims.

Applicants respectfully note that the combination of Dufour and Tayloe would merely lead a developer (per Dufour) to handover of a first network of a first connection-type to a second network of a second connection type when requested by the mobile station/ user equipment and (per Tayloe) to initiate an error procedure when the handover attempt to the second network fails.
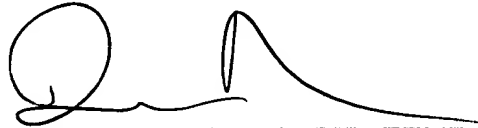
For at least these reasons, the rejection of claim 22 under 35 U.S.C. 103(a) as being obvious over Dufour in view of Tayloe is technically and legally improper and should be withdrawn. Likewise, each of the independent claims 39, 44, and 46 and the pending dependent claims, although patentably distinct from claim 22 and rejected on a separate basis, recite similar limitations and are allowable over Dufour and Tayloe for similar reasons, as well as for the separate limitations recited in these claims. Reconsideration and allowance of claims 22-33, 35-37 and 38-46 are respectfully requested.

Applicants respectfully submit that each of claims 22-33, 35-37 and 38-46 recites features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that each of these claims be allowed, and this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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